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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/358,408	07/22/1999	MANABU OHGA	862.2936	1537
5514	7590	01/25/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			BHATNAGAR, ANAND P	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/358,408

Applicant(s)

MANABU OHGA AND YOKOHAMA-SHI

Examiner

Anand Bhatnagar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/22/99 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

1. Applicant's amendment filed on 09/13/04 has been entered and made of record.
2. Applicant argues, on pages 9-10, that there is enablement for the limitation of "comparing the input viewing condition with conditions of the light sources to select a set of colorimetric data of a light source that has a condition similar to the input viewing condition," for claims 1, 8, and 20 and similarly claims 14, 16, and 18. Applicant refers to fig. 22 of the specification to show the enablement. Specifically, applicant points to elements S219 and 210 of fig. 22, wherein the d, distance, is calculated and is the comparing step. Examiner agrees that this is a comparing step but it is not the comparing step as claimed in claim limitations of these claims. What is claimed in these claims is a "comparing the input viewing condition with the conditions of the light sources." In fig. 22 elements 218, 219, and 210, what is taking place is a comparison of a white point under a viewing condition vs. a white point of a colorimetric illuminant which is not the same as a comparison of the input viewing condition compared to conditions of the light sources. Examiner does not see wherein there are multiple light sources that the input viewing condition is being compared to. Examiner maintains the 35USC 1st paragraph rejections on these claims. Examiner refers to the action below.
3. Applicant's arguments, see Amendment, filed 09/13/04, with respect to the rejection(s) of claim(s) 1, 3-5, 8, 10, 11, 14, 16, 18, and 20 under 35 USC 102(e)

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and claims 2, 7, 9, 13, 15, 17, 19, and 21 under 35USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Arai (U.S. patent 5,546,195) and Usami (U.S. patent 5,748,342).

Examiner refers to the action below.

DETAILED ACTION

Claim Rejections - 35 USC § 112

4. A.) The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 8, 14, 16, 18 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claims 1, 8, and 20: These claims contain a limitation of "comparing the input viewing condition with conditions of the light sources to select a set of colorimetric data of a light source that has a condition similar to the input viewing condition" which was not in the specifications in the instant invention as originally filed. On page 20 of the original specifications of the instant invention a look up table #11 is generated/updated based on the ambient

light/viewing condition, but there is no comparison step as claimed. Regarding claims 14 and 16: These claims contain a limitation of "a selector, arranged to select a set of colorimetric data of a light source, which has a condition similar to the input viewing condition, from the plurality of sets of colorimetric data in accordance with comparison between the input viewing condition and condition of the light sources," which was not in the original specification on the instant invention as originally filed. On page 20 of the original specifications of the instant invention a look up table #11 is generated/updated based on the ambient light/viewing condition, but there is no comparison step as claimed.

Claims 1, 8, 14, 16, 18, and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims lack enablement for the reasons given above.

B.) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 9, 15, 17, 19, and 21 recite the limitation "the profile" and claims 7 and 13 recite "to another profile". There is insufficient antecedent basis for these limitations in the claims. Examiner will address these claims as best understood.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-11, and 14-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Arai (U.S. patent 5,546,195).

Regarding claims 1, 8, 14, and 16: Arai discloses an image processing method comprising the steps of:

obtaining a plurality of sets of colorimetric data which correspond to respective light sources (figs. 3 and 4 element 3a-3n, fig. 5 elements 3a'-3n', col. 3 lines 38-42, and col. 5 lines 38-42, wherein for each light source there is a specific neural network which inputs a colorimetric value for the specific light source. The neural networks with the colorimetric value are read as a plurality of sets of colorimetric data for each light source);

inputting a viewing condition (fig. 3 element 31 and col. 4 lines 40-53, wherein the photometer reads the illuminant light source);

comparing the input viewing condition with conditions of the light sources to select a set of colorimetric data corresponding to a light source that has a condition similar to the input viewing condition, from the plurality of sets of colorimetric data (col. 4 lines 53-67 and col. 5 lines 54-67, wherein the illuminant

light source is determined and compared to the light sources in a table and the appropriate neural network chosen according to the specific light source that has been determined); and

conjecturing colorimetric data depending on the input viewing condition from the selected set of colorimetric data (abstract, col. 5 lines 35-43, and col. 6 lines 1-3, wherein color separation values "colorimetric data" are generated, i.e. conjecturing colorimetric data, by the neural network based on the illuminant source that has been determined).

Regarding claims 18 and 20: They are rejected for the same reasons as claim 1, 8, 14, and 16 above and for the limitation of: the computer readable medium and computer program product (fig. 3 element 32).

Regarding claims 2, 9, 15, and 17: The method further comprising the step of caching the conjectured colorimetric data to the profile (col. 6 lines 20-28, wherein the generated color separation values are transmitted to the printing device in order to transform the image colors for the specific illuminant source. By sending the data to the printer it is inherent that these color separation values need to be stored in a memory so that they can be used to transform the image colors. This is read as caching the conjectured colorimetric data and creating a profile for the image transformation to take place).

Regarding claims 19 and 21 they are rejected for the same reasons as claims 2, 9, 15, and 17 and for the limitation of: the product (fig. 3 element 32).

Regarding claim 3: The method further comprising the step of generating conversion data for color matching based on the conjectured colorimetric data (col. 3 lines 53-56 and col. 6 lines 25-36, wherein the color image is printed/color matched for the illuminant source by using the conjectured color separation values. This is read as generating conversion data based on the conjectured colorimetric data since the colors are going to be transformed by the printer in order to print an image based on the specific illuminant source).

Regarding claims 4 and 10: The method wherein said comparing step includes selecting colorimetric data by comparing a chromaticity of a light source designated by the input viewing condition with chromaticities of the plurality of light sources to which the sets of colorimetric data correspond (col. 4 lines 42-52, wherein the color temperature or the spectral distribution is used to determine the illuminant source. This spectral distribution is the spectrum of the light, i.e. which is the color(s) of the light. The color(s) is determined by amount of chromacities of the red and blue colors).

Regarding claims 5 and 11: The method wherein said comparing step includes selecting colorimetric data by comparing a color temperature of a light source designated by the input viewing condition with color temperatures of the plurality to which the sets of colorimetric data correspond (col. 4 lines 42-52, wherein the color temperature or the spectral distribution is used to determine the illuminant source).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A.) Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai (U.S. patent 5,546,195) and Usami (U.S. patent 5,748,342).

Regarding claims 6 and 12: The method according to claim 8, wherein said generating step further comprises the steps of:

conjecturing a set of colorimetric data depending on the input viewing condition from the selected set of colorimetric data by using a color appearance model ; and

Regarding claims 6 and 12: The method wherein said generating step further comprises the steps of: It is rejected for the combination of reasons as claim 1 and 8 above and for the following limitation of a color appearance model: Arai discloses to perform color correction/matching on an image based on the illuminant source. Arai. does not teach to use a color appearance model to perform color correction on an image. Usami teaches to use a preview of the image (Usami; fig. 6 element S2 and col. 4 lines 54-67, wherein the preview of the image is performed in order to process the image for color correction. This

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preview image is read as a color appearance model.). It would have been obvious to one skilled in the art to incorporate the teaching of Usami to that of Arai because they are analogous in color correction/matching. One in the art would have been motivated to incorporate the teaching, of a color appearance model, of Usami to the system of Arai in order to let a user check the colors of an image to be formed (Usami; col. 1 lines 42-45).

generating the data for color matching corresponding to the input viewing condition from the conjectured set of colorimetric data (See claim 3).

B.) Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai (U.S. patent 5,546,195).

Regarding claims 7 and 13: The method according wherein the conjectured colorimetric data is cached to another profile in correspondence with the input viewing condition.

Arai discloses to transmit the generated color separation values "colorimetric data" to the printer for image color matching which creates a profile for the image (see claims 2, 9, 15, and 17 above). Arai does teach to cache the colorimetric data to another profile. It would have been obvious to one skilled in the art to modify the system of Arai wherein the data can be cached to more than one memory to be used for different colored images, different illuminant sources, different peripheral devices (such as a monitor) attached to the system, etc.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Arai (U.S. patent 5,559,604) for reproducing colors under different illuminants.

Hung (U.S. patent 6,075,563) for adjusting color tone under different light sources.

Contact Information

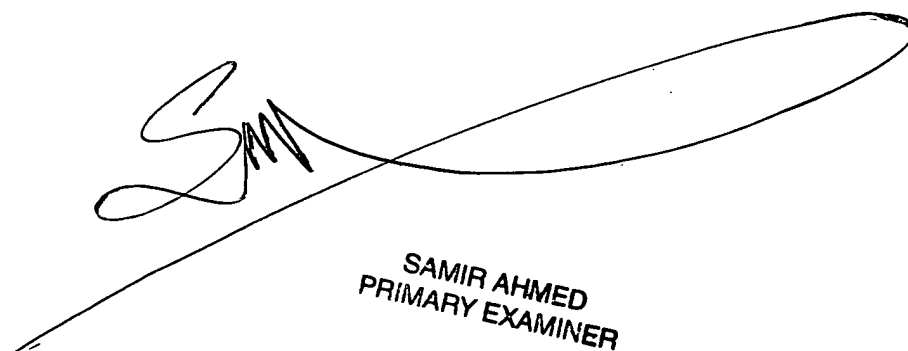
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Bhatnagar whose telephone number is (703) 306-5914, whose supervisor is Amelia Au whose number is 703-308-6604, group fax is 703-872-9306, and Tech center 2600 customer service office number is 703-306-0377.

AB

Anand Bhatnagar

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January 20, 2005


SAMIR AHMED
PRIMARY EXAMINER